REMARKS

This application has been reviewed in light of the Office Action dated February 21, 2006. In view of the foregoing amendments and the following remarks, favorable reconsideration and withdrawal of the rejection set forth in the Office Action are respectfully requested.

Claims 15-28 are pending. Claim 11 has been canceled herein, without prejudice or disclaimer of subject matter. Claims 15-28 have been added. Support for the new claims can be found in the original disclosure, and therefore no new matter has been added. Claims 15 and 26 are in independent form.

Claim 11 was rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,575,548 (*Corrigan, III et al.*) in view of U.S. Patent No. 6,601,941 (*Jones et al.*). Since Claim 11 has been canceled, the rejection of that claim is moot.

Each of independent Claims 15 and 26 recites, *inter alia*, that a value of a voltage for driving an analog circuit is higher than a value of a voltage for driving a digital circuit, and a value of a voltage to be supplied to a printhead is higher than the value of the voltage for driving the analog circuit. Applicants submit that the cited art does not suggest at least this feature of the claimed invention.

As explained in the specification (e.g., pages 1-4), conventionally, a single power supply voltage of 5V could be used for both digital and analog circuits. However, as semiconductor manufacturing has become more popular, it has become common for a digital circuit to be driven at a voltage of 3.3V. But it is difficult to drive an analog circuit at such a reduced voltage, as this would require some redesign of the analog circuit. Accordingly, it has

become common to use two different power supply voltages, 3.3V for the digital circuit and 5V for the analog circuit. However, such an arrangement increases the complexity of the device, e.g., increasing the number of components, such as external circuits and contacts for supplying the voltages. As a result, manufacture is made more difficult and expensive, and the device becomes less energy efficient and less compact.

The claimed invention mitigates the above problems by, e.g., the above-noted feature and the feature that the voltage to be supplied to the analog circuit is generated in a circuit included in the printhead from a high voltage used for the printing element supplied from outside of printhead.

Corrigan, III et al. relates to a system and method for controlling energy characteristics of an inkjet printhead. As shown in Fig. 29, a thermal control device 2910 includes a measurement control section 2915 and a temperature control section 2916. Measurement control section 2915 includes a reference voltage generator 2942, a DAC (digital to analog converter) 2934, a voltage generator 2944, and a voltage comparator 2950. Reference voltage generator 2942 generates a reference voltage, e.g., 5.12V +/- 0.1 V, which is kept stable regardless of temperature variations or manufacturing process variations. Voltage generator 2944 generates a measurement voltage proportional to the absolute temperature of the die, and has a substantially linear output voltage relative to temperature, e.g., equal to 2.7V + (10 mV x T), where T is the temperature in degrees Celsius. DAC 2934 receives inputs from reference voltage generator 2942 and counter 2920, and generates an output voltage proportional to those inputs. The outputs from DAC 2934 and voltage generator 2944 are input into voltage

comparator 2950 and compared, for the purpose of controlling the energy characteristics of the printhead.

Thus, *Corrigan, III et al.* teaches a reference voltage of 5.12V and a measurement voltage of 2.7V + (10 mV x T). Neither of these voltages is a power voltage for driving a digital or analog circuit.

Nothing in *Corrigan, III et al.* is understood to teach or suggest at least that a value of a voltage for driving an analog circuit is higher than a value of a voltage for driving a digital circuit, and a value of a voltage to be supplied to a printhead is higher than the value of the voltage for driving the analog circuit.

Jones et al. is alleged by the Office Action (page 4) to teach a "digital circuit compris[ing] a memory for storing at least a resistance value upon operation of said drive means." Even if *Jones et al.* be deemed to teach what the Office Action alleges it does, nothing in that document is seen to remedy the above-discussed deficiencies of *Corrigan, III et al.* with respect to the independent claims.

Since neither *Corrigan, III et al.* nor *Jones et al.* contains all of the elements of either of the independent claims, those claims are believed allowable over those documents.

A review of the other art of record has failed to reveal anything which, in Applicants' opinion, would remedy the deficiencies of the art discussed above, as references against the independent claims herein. These claims are therefore believed patentable over the art of record.

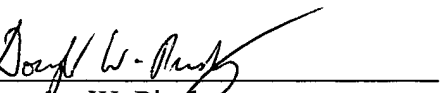
The other claims in this application are each dependent from independent Claim 15 and are therefore believed patentable for the same reasons. Since each dependent claim is

also deemed to define an additional aspect of the invention, however, the individual consideration of the patentability of each on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicants respectfully request favorable reconsideration and early passage to issue of the present application.

Applicants' undersigned attorney may be reached in our Washington office by telephone at (202) 530-1010. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,



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